

Serial No. 663,397

-2-

Art Unit 1303

Applicant's election with traverse of Group III, claims 22-40 in Paper No. 5 is acknowledged. The traversal is on the ground(s) that the claims are closely related and should be given unitary consideration. This is not found persuasive because of the reasons set forth in the restriction requirement, which clearly points out how the inventions are distinct from one another.

The requirement is still deemed proper and is therefore made FINAL.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --
(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 22, 26, 30 are rejected under 35 U.S.C. § 102(b) as being clearly anticipated by Netherlands 7408641 or Japan 167475.

Note the abstract, which clearly tech digesting waste paperboard to delignify it. Inherently delignifying reduces the Kapper number, which Japan explicitly teaches a lower kappa number.

Claims 22, 24, 26, 30 are rejected under 35 U.S.C. § 102(b) as being clearly anticipated by Murphy, Jr. '134 which teaches

Serial No. 663,397

-3-

Art Unit 1303

digesting corrugated waste board using steam heating and alkaline. It is deemed inherent that the kapper number is lowered since the same steps are performed as applicant claims.

Claims 23-25, 27-29, 31-40 are rejected under 35 U.S.C. § 103 as being unpatentable over Japan 167475 as applied above.

All of the limitations contained in these claims are obvious optimization of the corrugated board to be digested or are explicitly taught by Japan. For example Japan teaches the corrugated board has a ~~Kappa~~ number of at least 50. Thus to use a source of waste paper with a ~~Kappa~~ number of at least 80 is prima facie obvious and indeed encompassed by Japan's teaching. Japan teaches removal to a Kappa number of less than 40. The temperature range overlaps at 150°C (claims 35, 36). It would have clearly been obvious to use steam to heat the digester as is well known in the art. Japan teaches bleaching (claim 39). It also would have been prima facie obvious to use kraft white liquor as the alkaline solution since kraft pulping liquor is one of the most well known widely used process for digesting (virgin) pulp.

Claims 24 and 25 are also rejected under 35 U.S.C. § 103 as being unpatentable over Japan '475 as applied to claims 22 and 23 above, and further in view of Murphy Jr. '134 which if necessary clearly teaches obviousness of direct steam heating a waste paper

Serial No. 663,397

-4-

Art Unit 1303

digestor.

Any inquiry concerning this communication should be directed
to ^{Karen} Hastings at telephone number (703) 308-0470.

Richard V. Fisher
RICHARD V. FISHER
SUPERVISORY PATENT EXAMINER
ART UNIT ~~133~~ 1303

10-21-91

Hastings/cp
October 10, 1991

10-21-91